Aromatase Questions

1. Does the EDMVS agree that the prevalidation studies demonstrate that both the placental and recombinant assays are effective in identifying chemicals that inhibit aromatase?

2. EPA is planning a series of studies to better define and control the sources of variability observed in the work discussed today. Pending the successful resolution of this, does EDMVS believe that prevalidation has been successfully completed for both assays? In not, what additional studies should be performed before beginning interlaboratory studies?

3. Should EPA continue to validate both the placental and recombinant assays?
4. If the answer to question 3 is to continue the validation of the placental assay, should the preparation of placental microsomes be included as a parameter in the interlaboratory studies?

Outline of Validation Study Plan

- Assumptions:
  - Need to validate both assays
  - Select 5 laboratories (RTI + 4 labs)
  - Need to include validation of the preparation of placental microsomes
  - Conduct studies in triplicate
  - Use 6-8 chemicals in coded study including one negative chemical

- Approach:
  1. Demonstrate estrone production and inhibition of aromatase activity using various concentrations of positive control (4-OH ASDN) with recombinant and centrally supplied placental microsomes
  2. Run coded chemical studies with centrally supplied placental microsomes and recombinant microsomes
  3. Labs 2 and 4 will prepare placental microsomes and supply to labs 3 and 5. The four labs will repeat the coded chemical study with these microsomal preparations.